



Metro Neo

Why in News

The Centre is planning to approve national standard specifications for **Metro Neo, a no-frills, low-cost urban rail transit system targeted at tier 2 and tier 3 cities.**

Key Points

- Metro Neo is a **mass rapid transit system providing low-cost, energy-efficient and eco-friendly urban transport solutions** for tier 2 and tier 3 cities.
- Drawing traction power from overhead wires, Metro Neo will **not run on track but on road**. It is **suitable for places** where the traffic demand is around 8,000 passengers one way in peak time.
- Metro Neo systems are **lighter and smaller than conventional Metro trains**.
 - They **cost about 25% of conventional systems** but with **similar facilities**, and are **cheaper than the other budget option Metrolite**, which costs about 40% of the normal Metro.
- The **Maharashtra government** has already given a green signal for this state-of-the-art Mass Rapid Transit System (MRTS) for **Nashik**.
- **Metro Trains and Metrolite:**
 - The **metro rail system** being developed at present is **of high capacity** which is required for bigger cities with very high ridership and Peak Hour Peak Direction Traffic (PHPDT).
 - Seeing the success of metro rail in the country, several other **cities with lower projection of ridership** are also **aspiring for a rail based mass rapid transit system**, which could be fulfilled by **Light Urban Rail Transit System** named "**Metrolite**" with lesser capacity at much less cost.
 - 'Metrolite' would also act as a **feeder system to high capacity Metro**.

▪ Hyperloop Transportation System:

- It is a transportation system where a **pod-like vehicle** is propelled through a near-vacuum tube connecting cities at **speeds matching that of an aircraft**.
- The hyperloop concept is a **brainchild of Tesla founder Elon Musk**. The hyperloop system is being designed to transport passengers and freight.
- The USA-based Hyperloop Transport Technology (HTT) has claimed that it **costs USD 40 million per kilometre to build a hyperloop system while building a high-speed train line would cost almost twice**.
- The **Maharashtra government** had signed an agreement with **Virgin group** to build a Hyperloop in 2018.

- In 2017, the **National Highway Authority of India (NHAI)** had called the expression of interest (EOI) for launching **India's first driverless pod taxi systems** on a 70 km stretch from Dhaula Kuan in Delhi to Manesar in Haryana. Pod Taxi Scheme is also called the **Personal Rapid Transit (PRT)**.
- PRT consists of **driverless vehicles** in the shape of pods, which **can hold two to six people each**, and run along a predetermined course at **80-130 km per hour**.

Way Forward

- **Pod Taxi:**
- India grapples **with a host of mobility-related challenges** like pollution and traffic congestion, thus it is essential to ramp up and optimise mobility services.
- The **focus** has to be on promoting green, clean mobility. Electric vehicles are already on high priority on the government's agenda.
- Further, mobility services should be convenient to access by the public and secure, even for the fringes of the demographic, including women, children and the elderly.
- Cities are **engines of economic growth**. Thus, for a fast urbanising country such as India, we need such a fuel efficient mass rapid transit system to achieve **Sustainable Development Goals** and ensure movement of people instead of moving vehicles.